

Ecological Design in the Built Environment



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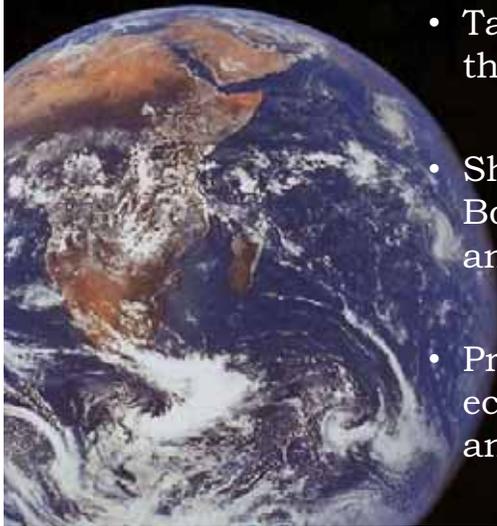
Committee Goals:

- Land Use Regulations that utilize an integrated planning approach
- Balance the need for growth/development with environmental protection
- Remove regulatory barriers



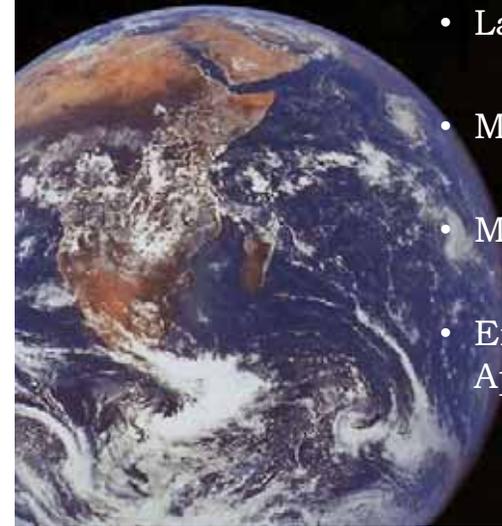
How can we do this?

- Take Smart Growth to the next level
- Show residents and Boards what is possible, and highlight successes
- Provide guidance on more ecological design for new and existing development



Local Challenges:

- Land Use patterns
- Mix of uses
- Materials
- Environmentally Appropriate Technology



Ecovillages and Cohousing Developments...examples to learn from...



urban and rural...



integrate a supportive social
environment with a low-impact,
sustainable way of life.



integrate various aspects of
ecological design, alternative
energy, community-building, and
much more





611 Ecovillage
7 farms
A World of Peace
Abrá 144
Abundance Ecovillage
Abundant Dawn Community
Acorn Community
ACUAREGUA Pueblito Acuarela
Agrovilla El Prado
ALDEA MAGIKA
Aldeafeliz
Alderleaf Farm and Wilderness College
Aldinga Arts Ecovillage
Alpha Farm
Anarres - Ca\ Favale
Anglesey Ecological Village
Aquarian Concepts Community
Arcosanti
Argavali, Place of Light
Assae De Mut
Asoc. Conciencia Comunitaria - Comunidad Chobita
Asociación Conservacionista Yiski
Asociación GAIA - Ecovilla Navarro
Asociación Red Colombiana de Reservas Naturales de la Sociedad Civil
Association Carapa
Association Epidaure
Atamei Village Council (Trust)
Auroville
Auroville Universal Township
Australian Community Gardens Network
Austrotopia - Network for Living in Community
Awaaraoa Bay Ecovillage
Back-to-Nature Ecovillage, Trang, Thailand
Balnashan, Ciudad de Luz / Red Iberoamericana de Luz
Balkan Ecovillage Network
Berea College Ecovillage
Berg-en-dal
Better In Belize
Big Island Cohousing and Ecovillage
Big Stone
Billin Hills
billicentiff
BIOSFERA
Blackwood/Earthcare Permaculture
Bloemendal Farm Ecovillage
Borealis
Braha
Braziers Park
Breitenbush Community

Bremer Commune
Brithdir Mawr
Broken Earth Tribal Pueblo
Burdagen
Buvukkonuk
Campbell Community: Blair Drummond
Campbell Community: Clanabogan
Campbell Community: Mourne Grange
Campbell Community: Valtersund Gaard
Campbill Dorfgemeinschaft
Campbill: Beannachar Community
Campbill: Ochil Tower School
Caravana Acoris por la Paz
Cardiff Place
Carp Ridge Eco-Wellness Centre
Casa cares
Casa da Ribeira
Casas del Sol
Cascada Verde
CEDEVIS
centro de tecnologia natural - centena
Cerro Gordo
Ces
Children's Village School
China Walls Ecovillage
Clearwater Commons
Clearwind Ecovillage
Clas du Doubt
Colorado EcoVillage
Colufia
Come Together Netzwerk
Community Land Trust Bliss
Comuna de Rhiannon
Comuna de Rhiannon
Comunidad de Aliados del Arca
Comunidad del Sur
Comunidad Ecologica Urbana Autosustentable
Comunidad Intencional Querencia
Comunidad Los Horcones
Comunitá di Etica Vivente Valle del Sole
Consejo de Visiones Guardianes de la Tierra
Cooperacion cultural y ecologica ecoaldeia putamaes
Cougar Hill Ecohamlet
CRESP
Crossroads Medieval Village Co-operative
Crystal Waters
Czech Republic Ecovillage Network
Dabrowka
Damanhur Federation
Dancing Rabbit Ecovillage

Dancing Rabbit Ecovillage
Dapala Farm
Das Dorf
Delestepe Farm
Delphin-Gemeinschaft
Dorscoth (formerly DEVA)
Dreamland
Dreamtime Village
Earth Connection
Earth Sanctuary Project
EarthArt Village
Earthaven Ecovillage
Earthlands
EarthSea
Earthwalk
East Wind Community
Eco Foca Ecological Village
Eco Truly Park - Eco Village
Eco Village Finstupa
Eco Yoff Community program
Eco-Spiritual Community Roschill
Eco-Tribe Teuge
Eco-Village Network U.K.
Ecoaldeia Alborada
Ecoaldeia Amazonia
Ecoaldeia Aurora
Ecoaldeia Fronteniza El Pauji
Ecoaldeia Huehucocoyotl
Ecoaldeia Manuaré
Ecoaldeia Vega de los Rios
ecodorp
ecocovillage
ECOLonic - Centre Ecologique International
EcoNewfolk Ecovillage
EcoPolis (Lithuania, Vilnius)
EcoReality Coop
Ecotopia Romania Association
EcoVersity
Ecovila Corcovado
Ecovillage & Cohousing Network of NZ
Ecovillage and Cohousing Association of NZ
Ecovillage at Ithaca
Ecovillage Cohousing Cooperative
Ecovillage Detroit
Ecovillage e. V.
Ecovillage Grishino
Ecovillage Kovcheg
Ecovillage Mont Radjar
Ecovillage Network of Canada/Réseau des Écovillages du Canada
Homeland

Ecovillage of Loudon County
Eden Project
Eden Ranch Community
Edinstvo
EKBO
El Cielo Lakech EcoVillage
El Molino Parador de Ti Mismo, Posada de Ecotopia
Elfentree
Eliopoli
Eltham Ecovillage - dulaiwurrong village
Enoia
ENOTA MOUNTAIN ECOVILLAGE
Ethnic village
FalconBlanco
Fiji Ecology
Finca Amrita in Costa Rica
Finca Ecologica El Zopilote Permaculture Ranch
FINCA LA PAZ
Finca Las Brisas
Findhorn Foundation
fondale
Forum-Vauban
Friends of the Trees Society
Fryers Forest
Fundação Terra Mirim
Fundación Dama y Vida - Ecoaldeia La Atlántida
Fundación Durika
Gaia University
Gaia Villages
Gaija
Galgafarm
Galions e.V.
garden villa
GEN-Senegal
GEN-Finland
Gesundheit Institute
Glen Valley Organic Farm
Gli Elfi del Gran Burrone
Global Community Communications Alliance
Global Ecovillage Network - Oceania/Asia
Green River Commons
Green Valley Ecovillage
Green Village Philadelphia
Greenheart
Groby Ecohamlet
Gunes Key
Gyűrűs Ecovillage
Hare Krishna Farm
heARTbeat Collective

Heartwood Hamlet
Heathcote Community
Heaven's Haven
Hei Wa House
Heliopolis
Hermes Projekt
Hertha Levefellesskab
Homeland
Homestead Cropping and Ecoagriculture Research Center for Sustainable Rural
Hummingbird Ranch
Hundredfold Farm
Hungarian National Network
Hurdalecovillage
Hurdalsjøen Økologiske Landsby
IDOF
imecevi
Institut for Communication Development (Incomdev)
Instituto de Permacultura e Ecovilas do Cerrado (IPEC)
Irish Rural Link
Island Park Sustainable Community
Islanders Permaculture Ecovillage
Isle of Avalon Foundation
Isle of Erraid Community
Israel National Contact
Jagers Community
Jalanboh
Jordan Village
Kaditah
Kakwa Ecovillage
Kangasala Yhteiskylä
KAPIEVI ECOALDEIA
KATAJAMÄKI
Kimbant Okodorf
Keuruu Ecovillage
Khula Dhamma Ecovillage
Kibbutz Lotan
kirstinelund
Kitezu Children's Community
Kohatu Toa Eco Village
Kommune Glederskaufungen
Kookaburra Park
Krisna-völgy (Krisna-valley)
Krunai
Kuthumba Ecovillage
La Comune di Bagnaia
La Flor del Agua
La Pequeña Granja de Mamá Lulú
Lakabe Community

Las Cañadas Bosque de Niebla
Lebensgarten Steyerberg
Lebensgut Pomnitz
Libana Università di Alcatraz
Lilicoon
Living Earth Ecovillage
Lórien
Los Angeles Eco-Village
Los Guayabos Comunidad Ecológica
Los Molinos de Rio de Aguas
Lost Valley Educational Center
LOS
Main Arm Eco Village
Manitou Arbor Ecovillage
Manzanita Village
Mariahalom Biofalu
Marquina Ecovillage/El Poncho Ecoenter
Matavenero Y Poibueno
MEDINA
Mfangano Island ecoVillage
Midrand EcoCity
Mondial Arts Eco Village
Moonee Creek Co-op
Moonshadow
Moora Moora Co-opertive
Munkesgaard
Namaste Green
Narrow Ridge Earth Literacy Center
Nashira un canto de Amor
Nature's Spirit
Nevada City, Ca. Ecovillage
New Gaia
Nippon Ecovillage Network
Northern Sun Farm Co-op
NuTribe Ecovillage
Nyí Forum, Christiania
O.U.R. Ecovillage
Oak Village Commons
Oeko LeA
Oekodorf Sieben Linden
Oldham
Old Mill Farm
olivarillo
OMROOTS
oneVillage Foundation-Kenya
Oregon Working Group for a Eastern Oregon Ecovillage
Osagewood
Otamaten Ecovillage
Oudemolen Eco Village

Lulu
 Lakabe Community
 Phoenix Cooperative Ecovillage
 Pihon Ecovillage
 Pacific Gardens Cohousing Community
 Pacifica Ecovillage
 Parque Visao Futuro
 Patanga
 Peaceful Gardens
 Permacultura Montsant
 Plan B Ecovillage
 Point Of Infinity Retreat Center & Community
 Port Townsend Ecovillage
 Possibilities
 Possum Hollow
 Potash Hill Community
 Praxis für Yamagishisches Leben
 Progetto Pecora Nera
 Programa sobre Medio Ambiente
 Pueblo Sacbe
 Pun Pun
 Quinta Arco-Iris
 rainbow eco peace village
 Rainbow's End Ranch
 Rambla de la Matunza
 Rampur
 Rancho Estrella
 Red Colombiana de Ecoaldeas y Comunidades Alternativas
 Red De Ecoaldeas de Mexico y Mesoamerica
 Red Iberica de Ecoaldeas
 Redfield Community
 Refugio del Rio Grande
 Réseau Francaise Eco-Villages
 Reserva Integral y Ecoaldeas Sasaki
 RIVE
 Riverside
 Rockmount Forest Park
 Romania National Contact
 Rosneath Farm
 Round the Bend Conservation Co-op Ltd
 Rudo Rwa Mwaru
 Russian Ecovillage Network
 S.E.A.L. (Sustainable Ecological Alternatives for Living)
 Sacred Groves
 San Diego Ecovillage
 San Mateo Ecovillage
 Santa Branca Ecovillage
 Sarvodaya Dhamsak/GEN South Asia
 Schloss Glarisegg

Self Sustaining Village - Den Selvforsynende Landsby
 Shamballa
 Shannon Farm
 Short Mountain Sanctuary
 Sidrahe
 Sirius Community
 Solaris Valhalla CSA Farm and Educationl Center
 Solheimar
 Solution de vivre
 Somerville Ecovillage
 Southwest Sufi Community
 STAND Center for Learning
 Stichting MW'2 / De Eenhoorn
 Stiftelsen Norske Okosamfunn
 Strawberry Fields Ecolodges and Permaculture Garden
 Studerbyn Permaculture Eco-village
 Sun Valley Community
 Sundog Ecovillage
 Suominen-Yhteisö
 Swanholm
 SYNANON
 Tamera
 Tammr Henna
 Tchamla Kingdom
 Terra Nostra
 Terra UMA
 Thiamahawla
 the Bliss Center
 The Bosque
 The Cell Habitat
 The Change
 The Farm
 The Grove
 The Happy Brigade Community
 The Panya Project
 The Peace Farm
 The Snaefellsas Community
 The Sunrise Project
 The Urban Green
 The Village Sustainable Project Ireland Ltd
 The Wolery
 Thologo Ecovillage
 Tonttula FBK
 Torri Superiore
 Tribe of Likatien
 Tui Community
 Tunttable Falls
 Ufabrik
 Unite the Caring Cooperative CoHousing Project

Upacchi
 Utopian Ecovillage Network in Ecuador
 Valdepiélagos / Sol y Tierra
 Valle de Sensaciones
 Valley Farm Ecovillage
 Verein Projekt Schloss Glarisegg
 Vereinigte Varben Wawavox
 Vilaj Espwa
 Villa Lokomuna
 Village Convivial de la Paix Dieu
 Villaggio Ecologico Solidale
 Villaggio Verde
 VIVERDE
 Vierhof
 Walagala
 Warriors of the Rainbow
 WAS Polish Ecovillage Network
 Western Cultural Heritage Institute
 White Hawk
 White Hawk Ecovillage
 Whole Village
 Whole Village
 Wilderland
 Windsong
 Wisteria
 Wongsanit Ashram
 XQSAN
 Yacu Yuru
 Yarrow EcoVillage
 Yew Wood Healing Center
 Yoga Farm Costa Rica
 Yonders Farm
 Zajezka
 ZEGG
 Zendik Farm
 Zuvuya



Local Challenges:

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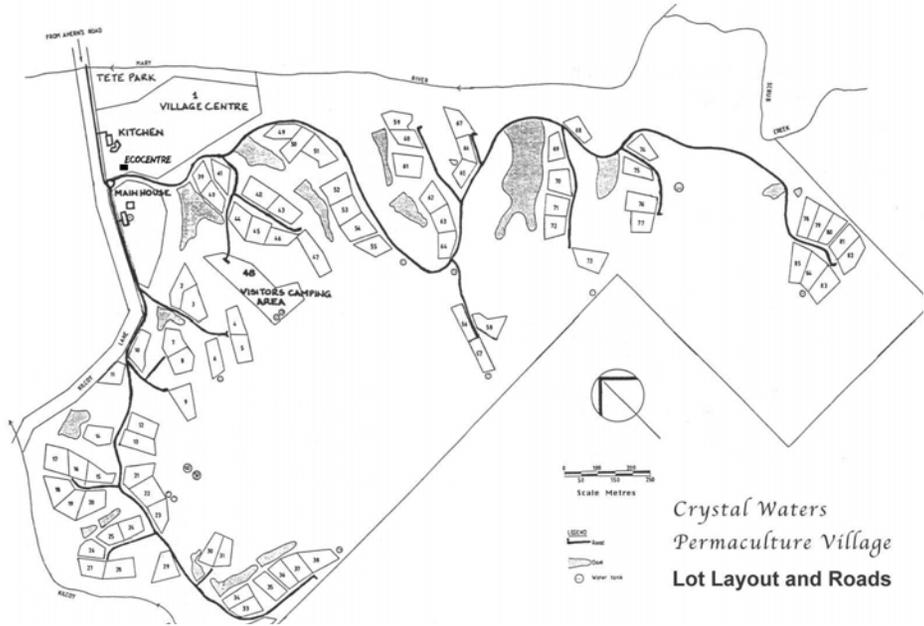


Land Use Patterns and Mix of Uses





Crystal Waters, Australia

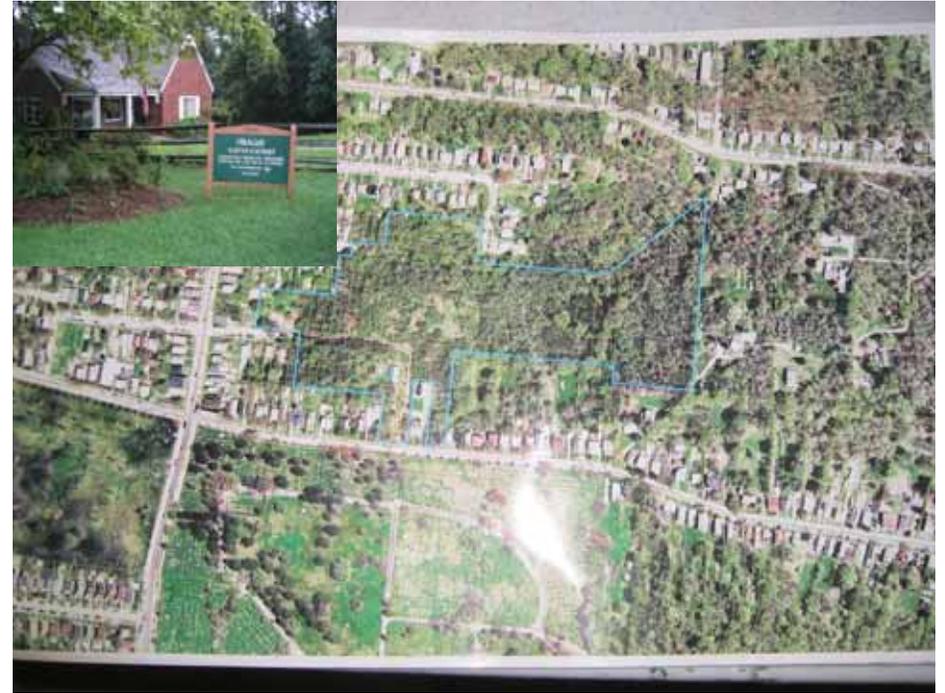








Enright Ridge Ecovillage Cincinnati, OH



Ecovillage at Ithaca

- Two 30 home cohousing neighborhoods
- An organic CSA vegetable farm
- An organic berry farm
- Office spaces for cottage industry, and others uses
- All on 20% of the 175 acres site!



Ecovillage at Jamaica Plain, MA

-Mixed-use residential and commercial development

-60 units of housing, 10,000 square feet of office/retail space, and on-site Montessori day care.

-Energy efficient features, environmentally sensitive construction materials and construction practices



Materials and Ecological Design



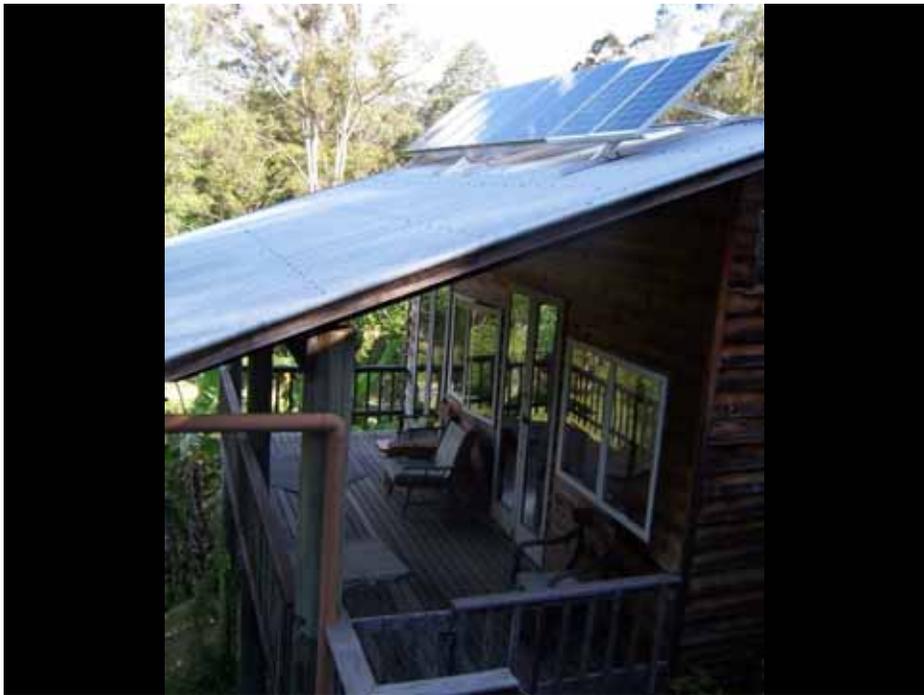






Environmentally Appropriate Technology





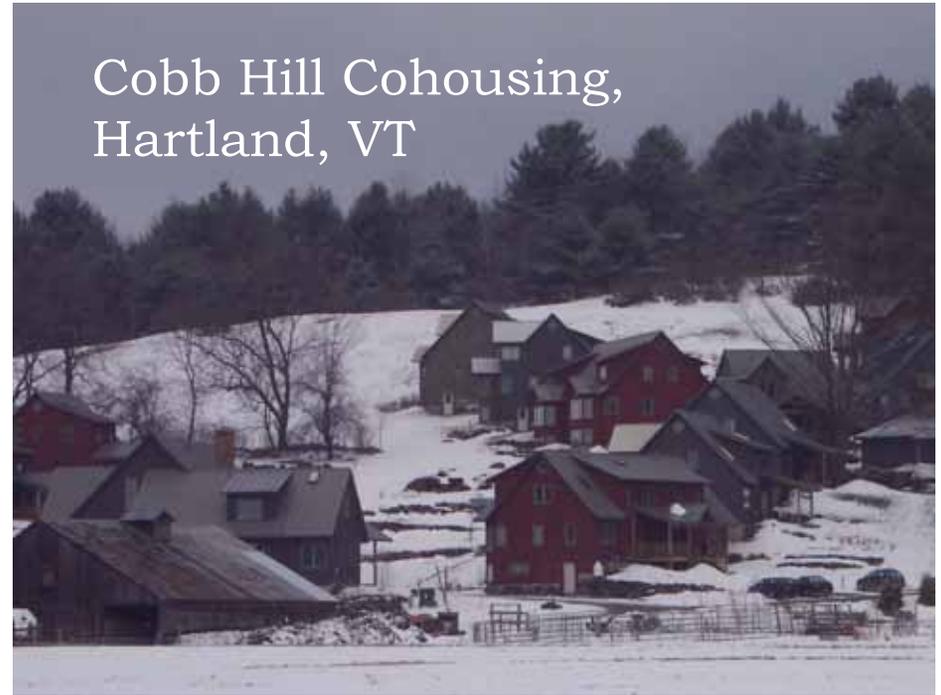




O.U.R Ecovillage ...a Regulatory Story



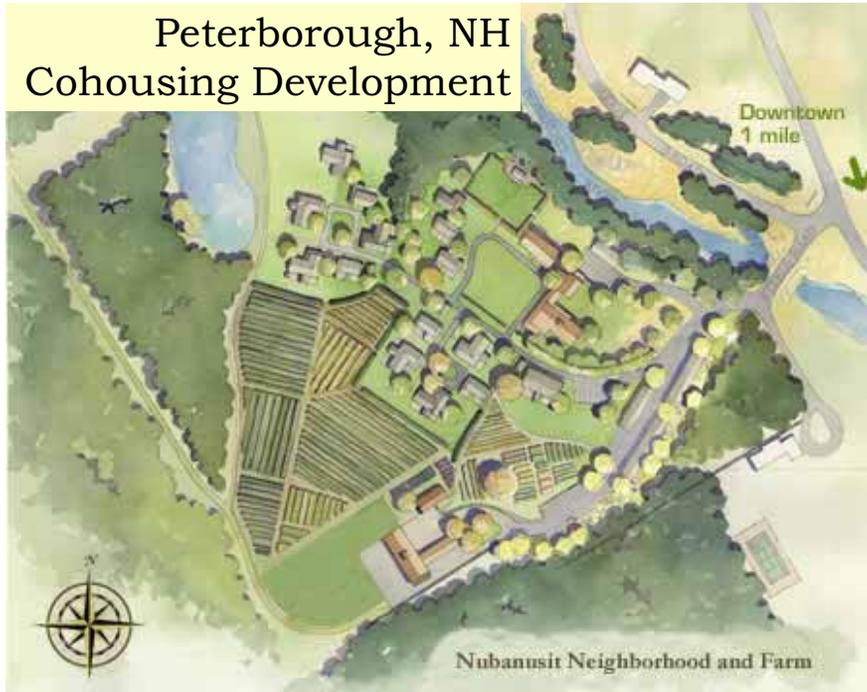
Cobb Hill Cohousing, Hartland, VT



- 270 acre farm
- Designing and building to meet [Vermont Star Homes](#)
- Proper orientation for passive solar heating and eventual solar hot water.
- Composting toilets with a simple greywater leachfield.
- A single wood-gasifying furnace to heat all units (with a forced-hot-water district heating system and propane backup).
- Wastewater heat recovery.
- Keeping cars to the edge of the housing area.
- Nontoxic indoor finishes.



Peterborough, NH
Cohousing Development



Most Local Boards...

- Are not aware of the range of sustainable development options available.
- Or the barriers that may exist in their town.
- For many the idea of Open Space Development regulations are still a big step.

Homeowners want to know what is allowed and how to do it...

The Path Forward

- Education
- Encourage Density and Conservation
- Provide Flexibility in Design
- Embrace opportunities for high tech and low tech approaches
- Provide clear guidance on the what and how
- Ensure state efforts support both the patterns and technology choices

Work with nature in mind...

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